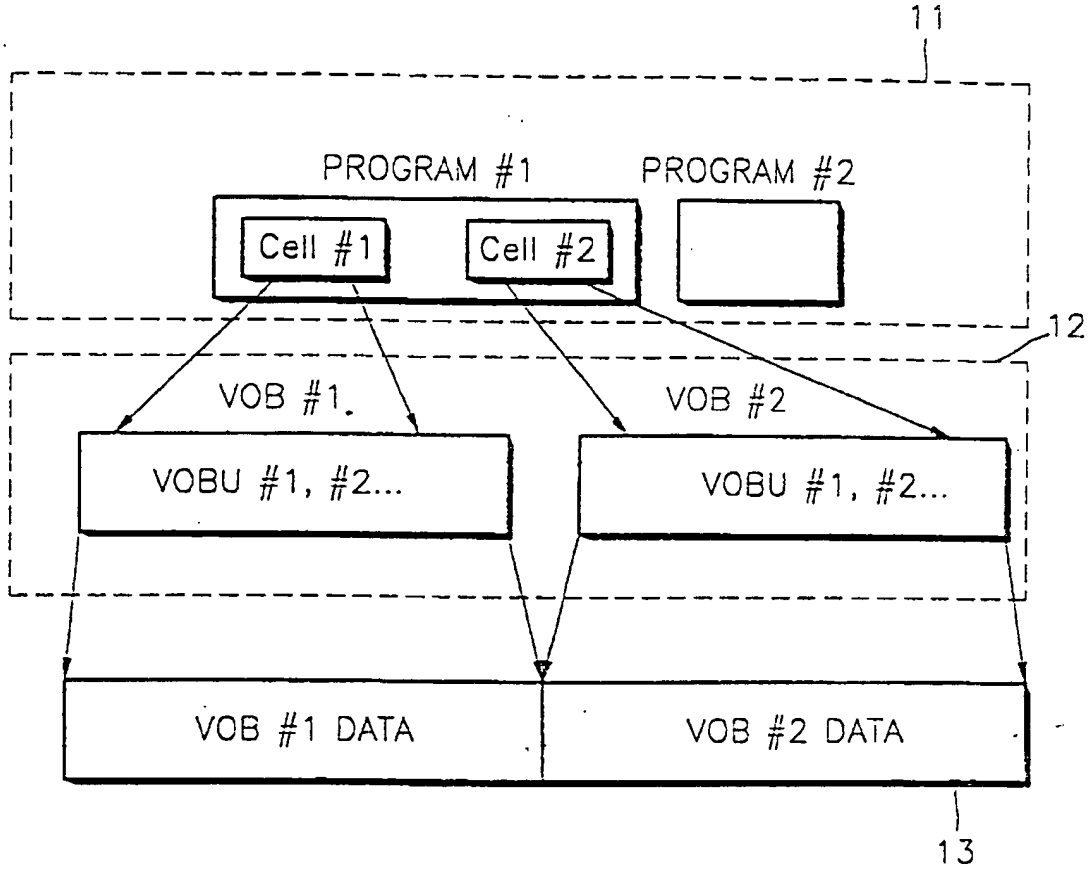
OIPE IAP45
MAR 13 2006
PATENT & TRADEMARK OFFICE

FIG. 1



BEST AVAILABLE COPY

FIG. 2

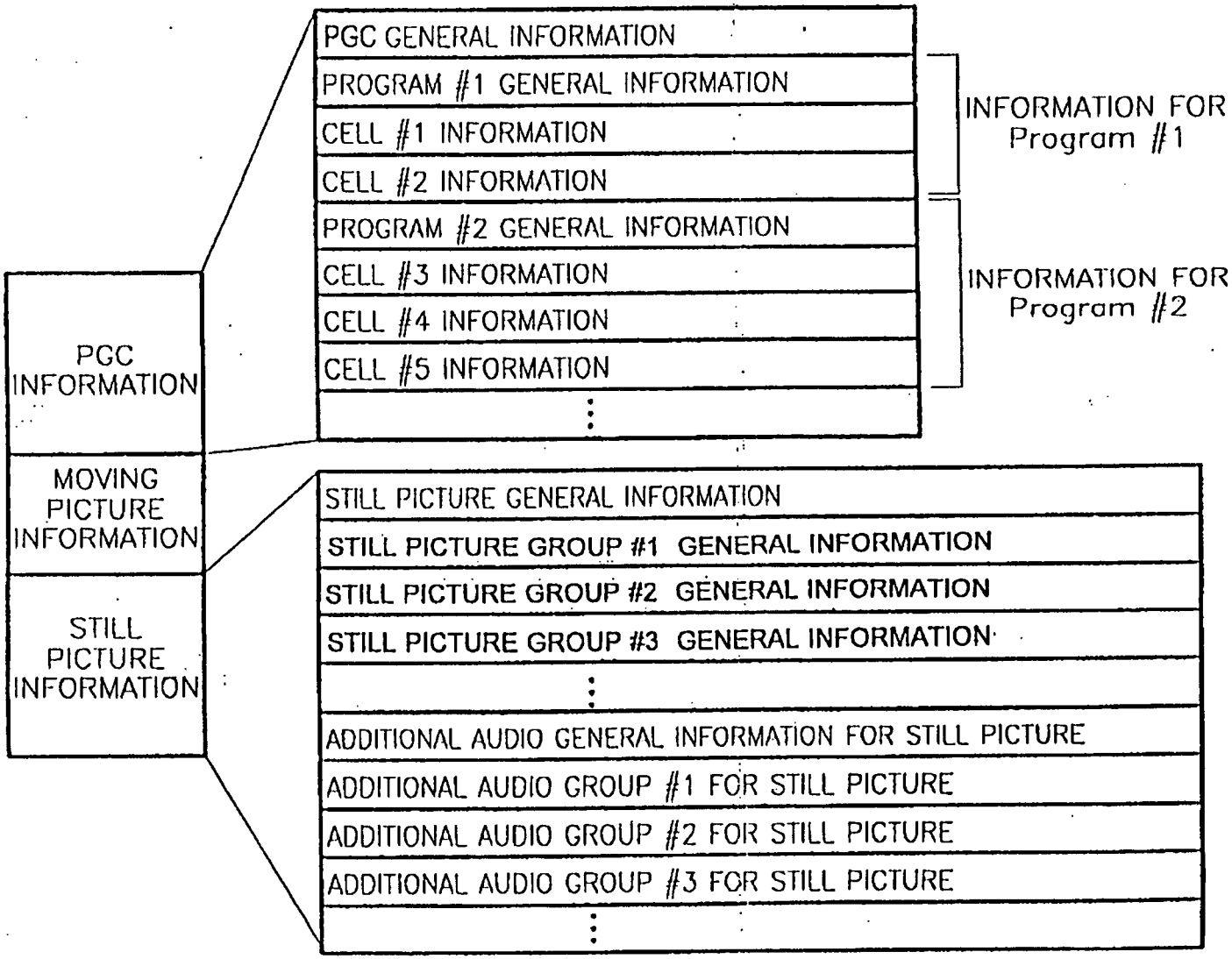

PGC INFORMATION
MOVING PICTURE INFORMATION
STILL PICTURE INFORMATION
PGC GENERAL INFORMATION
PROGRAM #1 GENERAL INFORMATION
CELL #1 INFORMATION
CELL #2 INFORMATION
PROGRAM #2 GENERAL INFORMATION
CELL #3 INFORMATION
CELL #4 INFORMATION
CELL #5 INFORMATION
INFORMATION FOR Program #1
INFORMATION FOR Program #2
STILL PICTURE GENERAL INFORMATION
STILL PICTURE GROUP #1 GENERAL INFORMATION
STILL PICTURE GROUP #2 GENERAL INFORMATION
STILL PICTURE GROUP #3 GENERAL INFORMATION
ADDITIONAL AUDIO GENERAL INFORMATION FOR STILL PICTURE
ADDITIONAL AUDIO GROUP #1 FOR STILL PICTURE
ADDITIONAL AUDIO GROUP #2 FOR STILL PICTURE
ADDITIONAL AUDIO GROUP #3 FOR STILL PICTURE

FIG. 3

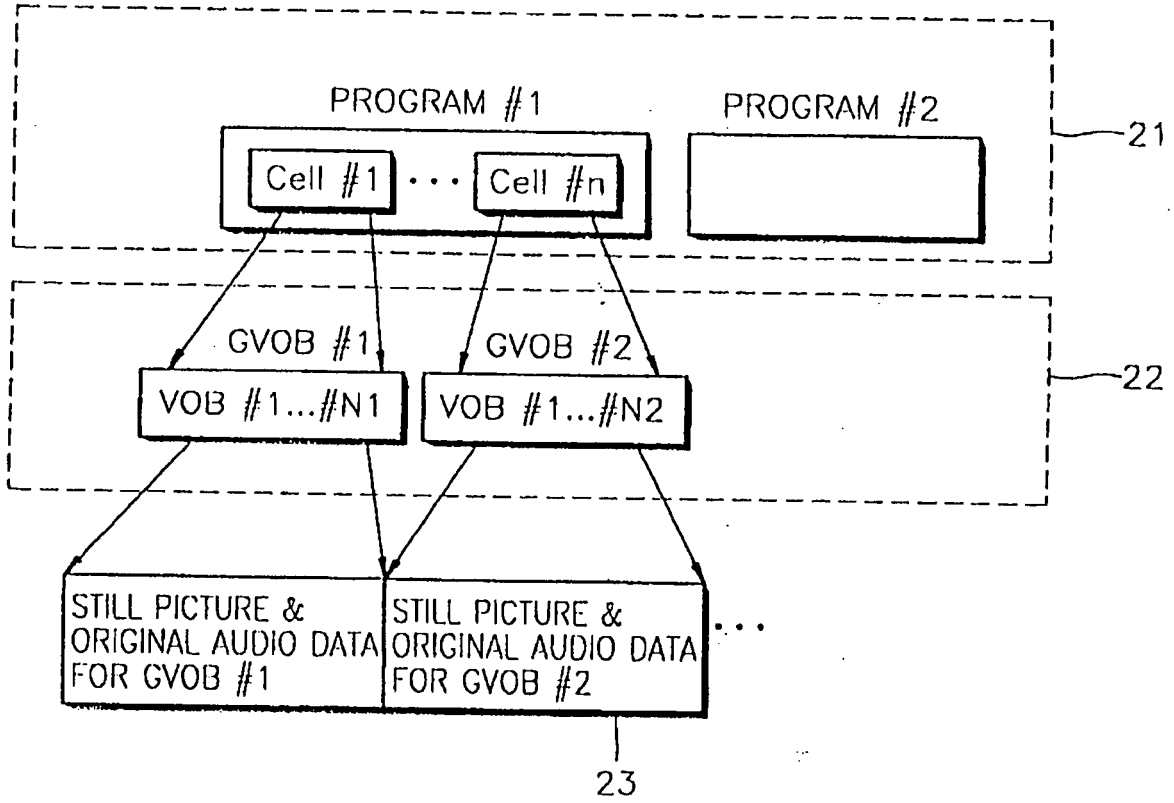

PROGRAM #1
PROGRAM #2
Cell #1
Cell #n
21
GVOB #1
GVOB #2
VOB #1...#N1
VOB #1...#N2
22
STILL PICTURE & ORIGINAL AUDIO DATA FOR GVOB #1
STILL PICTURE & ORIGINAL AUDIO DATA FOR GVOB #2
23

FIG. 4

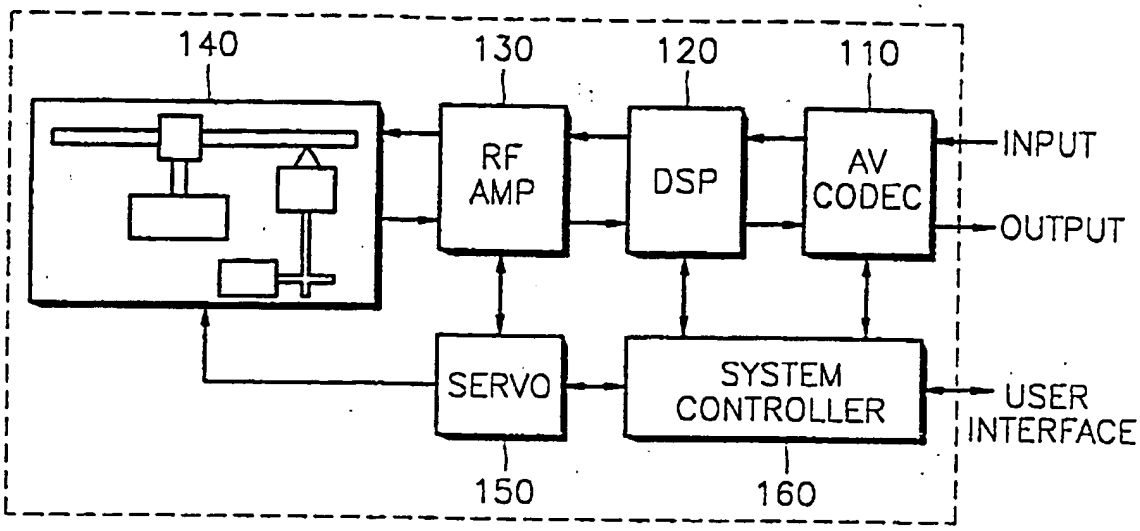

140
130
120
110
RF AMP
DSP
AV CODEC
INPUT
OUTPUT
SERVO
SYSTEM CONTROLLER
USER INTERFACE
150
160

FIG. 5

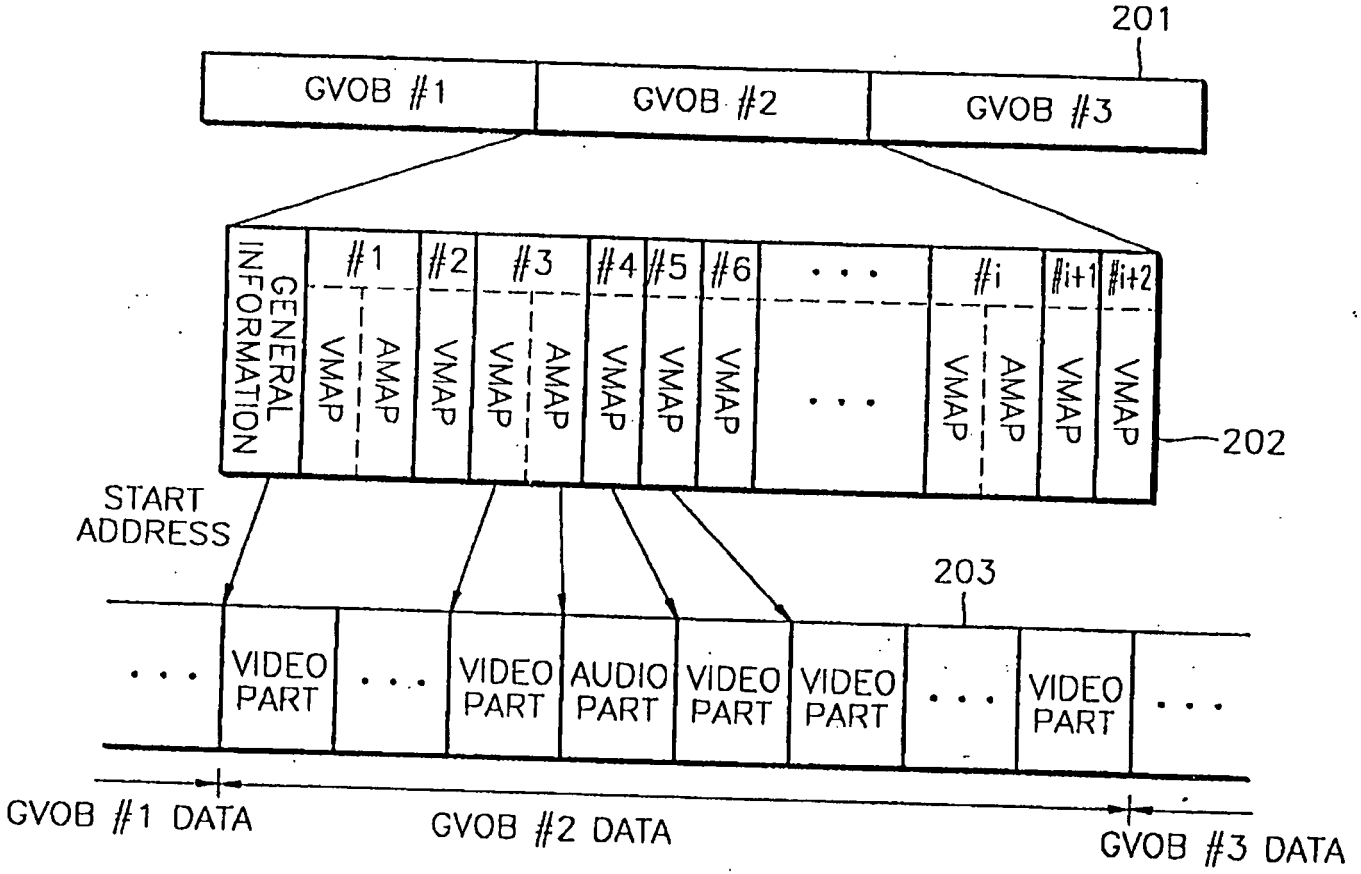

201
GVOB #1
GVOB #2
GVOB #3
GENERAL INFORMATION
#1
VMAP
AMAP
#2
VMAP
#3
VMAP
AMAP
#4
VMAP
#5
VMAP
#6
VMAP
• • •
#i
VMAP
AMAP
#i+1
VMAP
#i+2
VMAP
202
START ADDRESS
203
• • •
VIDEO PART
• • •
VIDEO PART
AUDIO PART
VIDEO PART
VIDEO PART
• • •
VIDEO PART
• • •
GVOB #1 DATA
GVOB #2 DATA
GVOB #3 DATA

FIG. 6

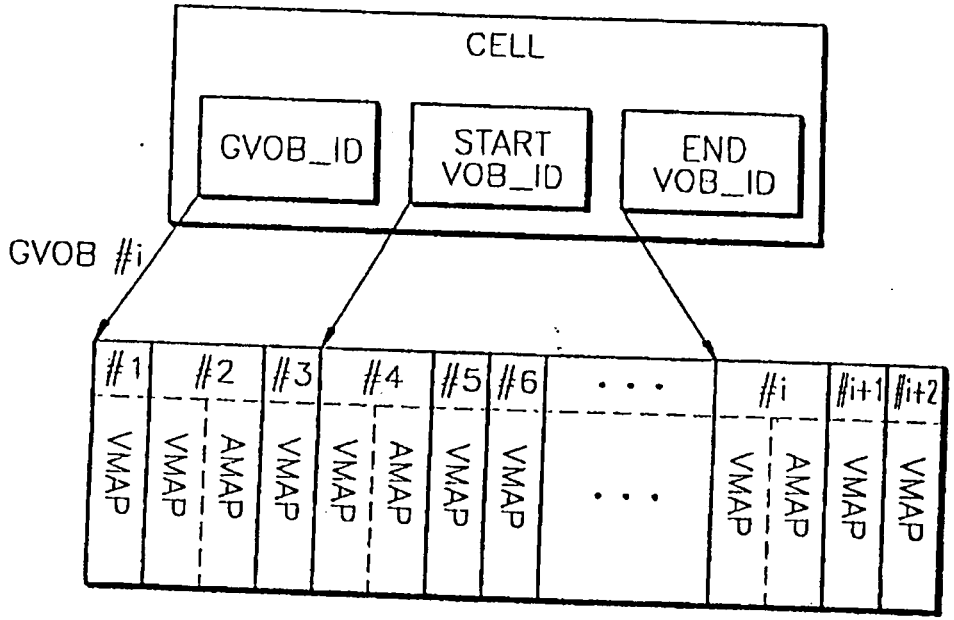

CELL
GVOB_ID
START VOB_ID
END VOB_ID
GVOB #i
#1
#2
#3
#4
#5
#6
#i
#i+1
#i+2
VMAP
AMAP

FIG. 7

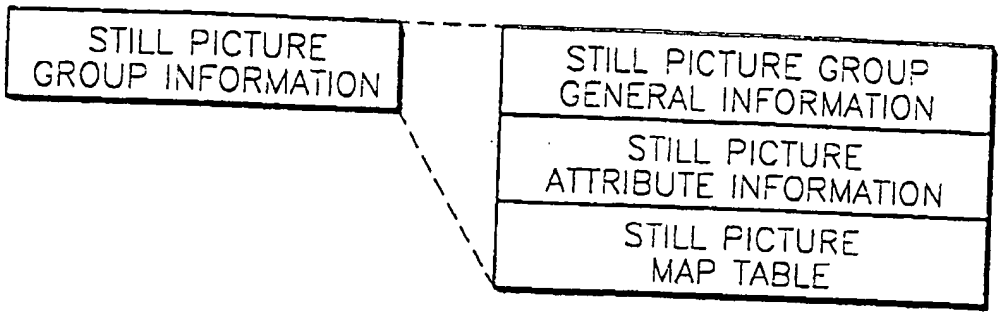


FIG. 8

	Contents	Number of Bytes
	Reserved	2 bytes
GVOB_ID	VOB Group ID	2 bytes
GVOB_S_ADR	Start address of VOB Group	4 bytes
GVOB_Ns	Number of Video Parts	1 byte

FIG. 9

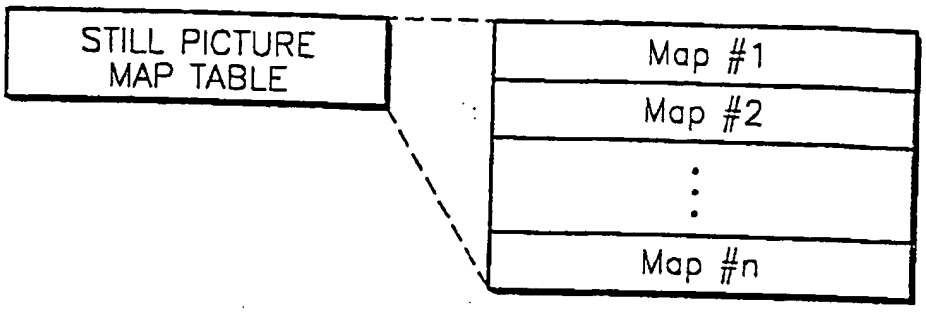


FIG. 10

	Contents	Number of Bytes
MAP_TY	Map type	1 bit
VOB_ID	VOB ID	7 bits
V_PART_SZ	Size of Video part.	1 byte

FIG. 11

	Contents	Number of Bytes
MAP_TY	Map type	1 bit
	Reserved	7 bits
A_PBTM	Playback Time of Audio	2 bytes
A_PART SZ	Size of Audio part	2 bytes

FIG. 12

	Contents	Number of Bytes
S_GVOB_ID	VOB Group ID for Still Picture	2 bytes
S_VOB_ID	VOB ID for Start Still Picture	1 byte
E_VOB_ID	VOB ID for END Still Picture	1 byte
	Reserved	5 bytes

FIG. 13

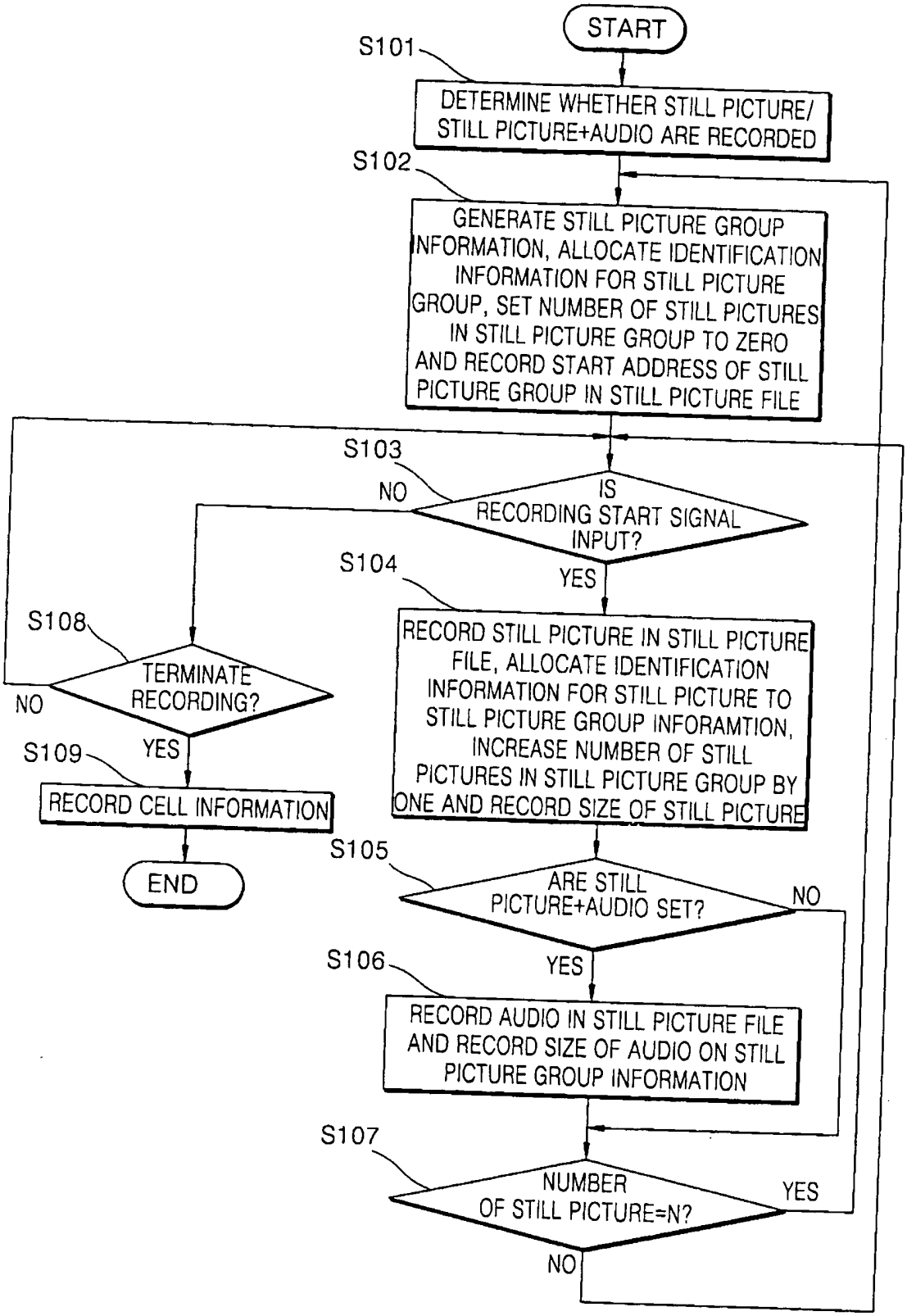
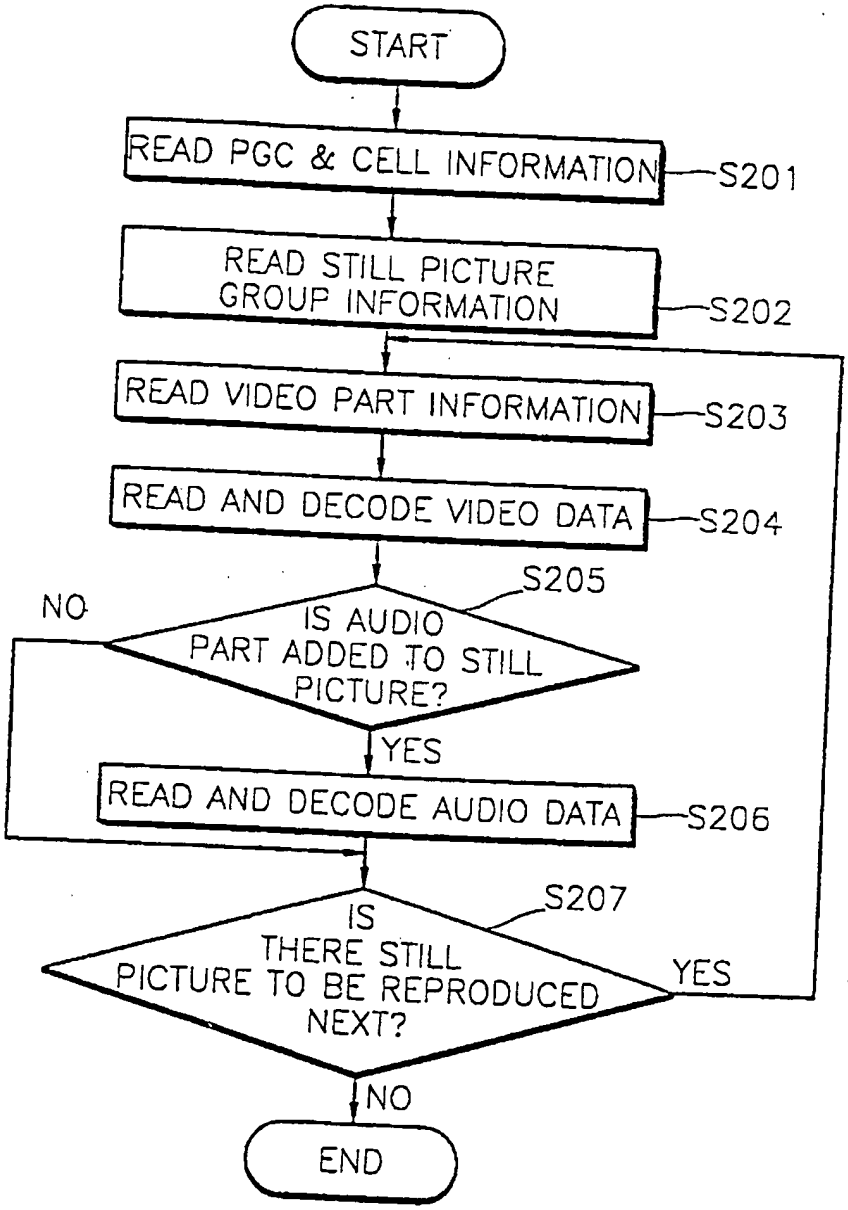

START
S101
DETERMINE WHETHER STILL PICTURE/ STILL PICTURE+AUDIO ARE RECORDED
S102
GENERATE STILL PICTURE GROUP INFORMATION, ALLOCATE IDENTIFICATION INFORMATION FOR STILL PICTURE GROUP, SET NUMBER OF STILL PICTURES IN STILL PICTURE GROUP TO ZERO AND RECORD START ADDRESS OF STILL PICTURE GROUP IN STILL PICTURE FILE
S103
IS RECORDING START SIGNAL INPUT?
NO
YES
S104
RECORD STILL PICTURE IN STILL PICTURE FILE, ALLOCATE IDENTIFICATION INFORMATION FOR STILL PICTURE TO STILL PICTURE GROUP INFORAMTION, INCREASE NUMBER OF STILL PICTURES IN STILL PICTURE GROUP BY ONE AND RECORD SIZE OF STILL PICTURE
S105
ARE STILL PICTURE+AUDIO SET?
NO
YES
S106
RECORD AUDIO IN STILL PICTURE FILE AND RECORD SIZE OF AUDIO ON STILL PICTURE GROUP INFORMATION
S107
NUMBER OF STILL PICTURE=N?
YES
NO
S108
TERMINATE RECORDING?
NO
YES
S109
RECORD CELL INFORMATION
END

FIG. 14


START
READ PGC & CELL INFORMATION
S201
READ STILL PICTURE GROUP INFORMATION
S202
READ VIDEO PART INFORMATION
S203
READ AND DECODE VIDEO DATA
S204
S205
IS AUDIO PART ADDED TO STILL PICTURE?
NO
YES
READ AND DECODE AUDIO DATA
S206
S207
IS THERE STILL PICTURE TO BE REPRODUCED NEXT?
YES
NO
END